

## AGENDA ITEM



# CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Adopt resolution approving Resource Adequacy Program for the City of Lodi (EUD)

**MEETING DATE:** April 19, 2006

**PREPARED BY:** Electric Utility Director

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**RECOMMENDED ACTION:** That the City Council, as Local Regulatory Authority (LRA), by resolution approve the attached Resource Adequacy Program for the City of Lodi.

**BACKGROUND INFORMATION:** In September 2005, the California legislature adopted Assembly Bill 380 establishing resource adequacy requirements for all load-serving entities. This legislation requires that it be demonstrated that sufficient capacity has been acquired to serve forecasted customer load and a fifteen percent reserve margin.

On March 13, 2006, the California Independent System Operator Corporation ("CAISO") submitted for filing at the Federal Energy Regulatory Commission (FERC), an amendment to the CAISO Tariff to establish an Interim Reliability Requirements Program ("IRRP"). The purpose of this amendment is to implement a Resource Adequacy (RA) program on an interim basis, until the implementation of the CAISO's Market Redesign and Technology Update ("MRTU"), scheduled for fall 2007. If the amendment is accepted by FERC, the CAISO IRRP will place RA obligations on all entities, including local publicly-owned electric utilities, such as Lodi Electric Utility. Due to the proposed implementation dates for the RA program, it is necessary for NCPA and the member cities to move expeditiously and present approved language to the CAISO by May 12, 2006. Absent approved language, it is possible NCPA members could automatically fall under the CAISO default RA provisions. This outcome would remove aspects of local control as well as present risk/cost uncertainties associated with the draft CAISO requirements.

NCPA staff, in cooperation with the NCPA members, has developed a Resource Adequacy Program that is recommended for adoption by the local regulatory authority of each member that would otherwise be subject to the CAISO's default RA criteria established in the CAISO Tariff. The NCPA developed Resource Adequacy Program has been approved by the NCPA Commission. The developed Resource Adequacy program contains the following elements:

- Demand Forecast and Protocols
- Planning Reserve Margin
- Resource Counting Conventions
- Compliance and Enforcement

Under the proposed Resource Adequacy Program, the Northern California Power Agency will be responsible for filing annual and monthly Resource Adequacy information for member agencies such as

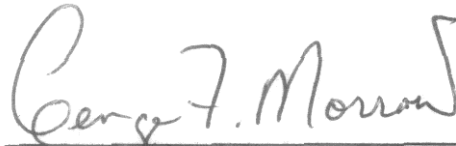
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APPROVED:   
Blair King, City Manager

Lodi Electric to the CAISO. Under the recommended Resource Adequacy Program, Lodi Electric is required to maintain a planning reserve of 15 percent over its peak load during the months of May through September. Lodi Electric is expected to have sufficient accredited resources to meet these criteria for 2006.

**FISCAL IMPACT:** None

**FUNDING:** NIA

A handwritten signature in dark ink, reading "George F. Morrow". The signature is written in a cursive style with a large initial "G" and a long horizontal stroke at the end.

George F. Morrow  
Electric Utility Director

**Prepared By:** Sondra Huff, Senior Rate Analyst

GFM/SH/mw

**Attachments**

**Cc.** Northern California Power Agency  
City Attorney

RESOLUTION NO. 2006-65

A RESOLUTION OF THE LODI CITY COUNCIL  
ADOPTING AND AUTHORIZING THE USE OF  
THE RESOURCE ADEQUACY PROGRAM  
FOR THE CITY OF LODI

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WHEREAS, the California Independent System Operator (CAISO), in order to insure sufficient resources to reliably serve the load in its control area, requires the regulatory authority for each load serving entity in its control area to adopt a Resource Adequacy Program; and

WHEREAS, the Northern California Power Agency (NCPA), in cooperation with its members, has developed such a Resource Adequacy Program: and

WHEREAS, the NCPA Commission recommends that each of its members in the CAISO control area adopt the Resource Adequacy Program.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby adopts and authorizes the use of the Resource Adequacy Program attached hereto marked Exhibit A.

Dated: April 19, 2006

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I hereby certify that Resolution No. 2006-65 was passed and adopted by the City Council of the City of Lodi in a regular meeting held April 19, 2006, by the following vote:

|          |  |
|----------|--|
| AYES:    | COUNCIL MEMBERS – Beckman, Hansen, Johnson, Mounce,<br>and Mayor Hitchcock |
| NOES:    | COUNCIL MEMBERS – None   |
| ABSENT   | COUNCIL MEMBERS – None   |
| ABSTAIN: | COUNCIL MEMBERS – None   |



SUSAN J. BLACKSTON  
City Clerk

## **RESOURCE ADEQUACY PROGRAM FOR THE CITY OF LODI**

The City Council for the City of Lodi, California, the Local Regulatory Authority (LRA) for Lodi Electric Utility, hereby adopts the following Resource Adequacy Program for the City's Electric Utility. Capitalized terms not otherwise defined herein shall be defined as set forth in the Master Definitions Supplement of the California Independent System Operator Corporation ("CAISO"). This Resource Adequacy Program shall remain in effect, subject to modification by the City Council until the implementation of the CAISO's Market Redesign and Technology Upgrade ("MRTU") Tariff.

### **1 RESOURCE ADEQUACY**

#### **1.1 Submission of Annual Resource Adequacy Plan**

Northern California Power Agency ("NCPA") will submit an annual Resource Adequacy Resource Plan to the CAISO, as the Scheduling Coordinator, on behalf of the NCPAB members on a schedule and in the format set forth by the NCPAB member LRA. For the purpose of this Section 1, NCPAB members include those MSS Operator entities identified in Schedule 18 of the Metered Subsystem Aggregator Agreement. The annual Resource Adequacy Plan should include the NCPAB members Demand Forecasts for each of the five summer months (May – September), established in Section 1.5, and identify the Resource Adequacy Qualified Capacity, established under Section 1.9, that the NCPAB members will rely upon to satisfy 90% of each of the five summer months Demand Forecasts plus the monthly Planning Reserve Margin, established under Section 1.6, for the relevant reporting year.

#### **1.2 Submission of Monthly Resource Adequacy Plan**

NCPA will submit a monthly Resource Adequacy Plan to the CAISO, as the Scheduling Coordinator, on behalf of the NCPAB members by the last business day of the second month prior to the compliance month and in the form set forth by the NCPAB member LRA. The monthly Resource Adequacy Plan should include the NCPAB members monthly Demand Forecast, established in Section 1.5, and identify the Resource Adequacy Qualified Capacity, established under Section 1.9, that the NCPAB members will rely upon to satisfy the monthly Demand Forecast plus the monthly Planning Reserve Margin, established under Section 1.6, for the relevant reporting month.

#### **1.3 Submission of Supply Plan**

Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Qualified Capacity are required, pursuant to the CAISO Tariff, to provide the CAISO with annual and monthly Supply Plans. NCPA will submit an annual Supply Plan to the CAISO on behalf of the NCPAB members and Silicon Valley Power ("SVP") on a schedule and in the format set forth by the NCPA member LRA. NCPA will submit a monthly Supply Plan to the CAISO on behalf of the NCPAB members and SVP by the last business day of the second month prior to the compliance month and in the form set forth by the NCPAB member LRA and SVP LRA. Both the annual and monthly Supply Plans shall include a listing of the NCPAB member's and SVP's commitments to provide Resource Adequacy Qualified Capacity to any Load Serving Entity for the applicable reporting period.

#### **1.4 Resource Adequacy Plan Compliance and Enforcement**

Once the CAISO has received the monthly Resource Adequacy Plan submitted by NCPA on behalf of its NCPAB members, the CAISO will verify that the NCPAB members have procured sufficient Net Qualified Capacity to comply with the Planning Reserve Margin, established in Section 1.6. To the extent the annual or monthly Resource Adequacy Plan does not include

sufficient Net Qualified Capacity to satisfy the Planning Reserve Margin, established in Section 1.6, or in the case of a mismatch between information included in the annual or monthly Resource Adequacy Plan and a Supply Plan submitted by the Scheduling Coordinator of a resource identified in the annual or monthly Resource Adequacy Plan, the CAISO will notify NCPA and attempt to resolve the issue. To the extent that NCPA is unable to resolve the identified issue, the CAISO will notify the NCPAB member LRA of the potential deficiency.

Once the NCPAB member LRA is informed of the deficiency and confirms that the NCPAB member's annual or monthly Resource Adequacy Plan is deficient, the NCPAB member LRA may determine if and how the deficiency will be resolved. If the CAISO identifies a mismatch between information included in the annual or monthly Resource Adequacy Plan and a Supply Plan submitted by the Scheduling Coordinator of a resource identified in the annual or monthly Resource Adequacy Plan, and the identified mismatch is not resolved prior to the 10<sup>th</sup> day before the effective month, the CAISO will accept the value contained in the Supply Plan to set the Net Qualified Capacity value for the applicable reporting month.

To the extent that a NCPAB member LRA requires its NCPAB member to resolve an identified deficiency in the annual or monthly Resource Adequacy Plan, and the NCPAB member has not resolved the identified deficiency, the NCPAB member must explain why the identified deficiency has not been resolved to its LRA, and possibly incur penalties or other sanctions adopted by the LRA. NCPA is required to report to the CAISO within thirty (30) days of any action taken by the appropriate LRA in response to the deficiency notification if the LRA does not provide public access to records or information regarding action taken for violations of its Resource Adequacy policies or rules.

#### 1.5 Demand Forecasts

The monthly Demand Forecast included in the annual and monthly Resource Adequacy Plan shall be based on the monthly peak Demand responsibility of the NCPAB members that is consistent with the forecasts provided to the CAISO under Section 6.1 of the Metered Subsystem Aggregator Agreement. For the purposes of Section 1, Demand shall be equal to Load plus firm Exports plus any NCPAB member on-demand obligation to third parties, measured in megawatts. For the purposes of this Section 1.5, the peak Demand responsibility shall be equal to the aggregated NCPAB member coincident peak Demand Forecast for the relevant month irrespective of the CAISO system coincident peak.

#### 1.6 Planning Reserve Margin

The annual and monthly Resource Adequacy Plan will include a Planning Reserve Margin equal to no less than 15% of the monthly peak Demand responsibility set forth in Section 1.5.

#### 1.7 ISO Authority to Dispatch NCPA Resources

The CAISO's authority to Dispatch any portion of the capacity of any Generating Unit of NCPA, other than in accordance with a bid submitted to the CAISO by NCPA's Scheduling Coordinator, is set forth in and subject to Section 7.1 of the Metered Subsystem Aggregation Agreement.

#### 1.8 Resource Adequacy Qualified Capacity

Resource Adequacy Qualified Capacity shall be the quantity of capacity from a resource stated in megawatts which is listed in the annual and/or monthly Resource Adequacy Plan. Qualified Capacity is the capacity from a resource prior to the application of the Net Capacity determination that shall be made pursuant to the provisions of the CAISO Tariff. The criteria for determining the types of resources that may be eligible to provide Qualified Capacity and for calculating Qualified Capacity from eligible resource types is provided in Section 1.9.

## **1.9 Qualified Capacity Criteria**

### **1.9.1 Net Dependable Capacity**

Net Dependable Capacity ("NDC") defined by North American Electric Reliability Council ("NERC") Generating Availability Data System ("GADS") information will be used to determine the Qualified Capacity of some of the resource types identified in Section 1.9. For the purpose of Section 1.9, NDC is equal to Gross Dependable Capacity ("GDC") less the unit capacity utilized for the unit station Service or auxiliaries. GDC is equal to Gross Maximum Capacity ("GMC") modified for seasonal limitations over a specified period of time. GMC is the maximum capacity a unit can sustain over a specified period of time when not restricted by seasonal or other deratings.

### **1.9.2 NCPA System**

As defined in the Metered Subsystem Aggregator Agreement, the NCPA System means all transmission and distribution facilities owned or controlled by the NCPA MSS members, and all Generating Units within the ISO Control Area owned or controlled by NCPA members,

### **1.9.3 Jointly-Owned Facilities**

A jointly-owned facility must either be identified in Schedule 14 of the Metered Subsystem Aggregation Agreement, located within the NCPA System, a Participating Generator, or a Qualified Facility to be considered Qualified Capacity. The Qualified Capacity for the entire facility will be determined based on the type of resource as described elsewhere in Section 1.9. The NCPAB member's entitlement to the Qualified Capacity of the facility may encompass the entire Qualified Capacity of the facility, or may be limited to a portion of the Qualified Capacity of the facility. The total amount of Qualified Capacity that may be identified in the annual and or either the monthly Resource Adequacy Plan is limited to the total jointly-owned facility Qualified Capacity determined in Section 1.9.

### **1.9.4 Thermal**

Thermal generating facilities must either be identified in Schedule 14 of the Metered Subsystem Aggregation Agreement, located within the NCPA System, a Participating Generator, or a Qualified Facility to be considered Qualified Capacity. Thermal generating facilities that are not required to sign a Participating Generator Agreement pursuant to Section 2.2.1 of the CAISO Participating Generator Agreement are also eligible to be identified as Qualified Capacity. The Qualified Capacity of thermal facility will be based on Net Dependable Capacity as defined in Section 1.9.1.

### **1.9.5 Hydro**

Hydro generating facilities must either be identified in Schedule 14 of the Metered Subsystem Aggregation Agreement, located within the NCPA System, a Participating Generator, or a Qualified Facility to be considered Qualified Capacity. The Qualified Capacity of a pond or pumped storage hydro facility will be based on Net Dependable Capacity as defined in Section 1.9.1, minus variable head de-rate based on current reservoir levels with dry year (1-in-5 dry year) forecasted inflows. The Qualified Capacity of a run-of-river hydro facility will be based on Net Dependable Capacity as defined in Section 1.9.1, minus actual or forecasted conveyance flow, stream flow, or canal head de-rate.

### **1.9.6 Unit-Specific Contracts**

Unit-specific contracts will fully qualify as Resource Adequacy Qualified Capacity. The generating facility identified in the contract must either be identified in Schedule 14 of the Metered

Subsystem Aggregation Agreement, located within the NCPA System, a Participating Generator, or a Qualified Facility to be considered Qualified Capacity. The generating facilities identified in the contract that are not required to sign a Participating Generator Agreement pursuant to Section 2.2.1 of the CAISO Participating Generator Agreement are also eligible to be identified as Qualified Capacity.

#### **1.9.7 Firm Physical Contracts**

Firm energy contracts which contain provisions to ensure reliable physical delivery and that do not contemplate frequent financial settlement for non-delivery, or that contain provisions that identify non-delivery as a default condition subject to contract termination, will fully qualify as Resource Adequacy Qualified Capacity.

#### **1.9.8 Industry Standard Contracts with Liquidated Damages Provisions**

Firm energy contracts with liquidated damages provisions as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm energy contract that provides the seller an option not to deliver based on economic reasons will count as Qualified Capacity until a commercially available industry standardized capacity based product is readily available, and which is provided under an agreement similar to the Western Systems Power Pool Agreement or the Edison Electric Institute pro forma agreement.

#### **1.9.9 Wind and Solar**

The Qualified Capacity of firm wind and solar generating facilities, with backup sources of generation, will be based on Net Dependable Capacity as defined in Section 1.9.1.

Wind and solar generating facilities without backup sources of generation must be participants in the CAISO's Participating Intermittent Resource Program ("PIRP"). The Qualified Capacity of wind and solar facilities without backup sources of generation will be based on their monthly historic noon to 6:00 p.m. capacity factor, using a three-year rolling average.

New wind and solar generating facilities without backup sources of generation which do not have three years of historic performance data will be assigned a default Qualified Capacity for each year of missing historical performance as follows:

- (1) the Qualified Capacity of another solar or wind generator with historic data located in the same weather regime with similar technology adjusted for the nameplate capacity ratio of a new generator and the similarly situated proxy generator.

The default Qualified Capacity values will be replaced on a year by year basis with actual performance data as the data becomes available to form a three year rolling average.

#### **1.9.10 Geothermal**

Geothermal generating facilities must either be identified in Schedule 14 of the Metered Subsystem Aggregation Agreement, located within the NCPA System, a Participating Generator, or a Qualified Facility to be considered Qualified Capacity. The Qualified Capacity of a geothermal facility will be based on Net Dependable Capacity as defined in Section 1.9.1, adjusted for steam field degradation.

#### **1.9.11 Treatment of Qualified Capacity of QFs**

The NCPAB members do not currently have any Qualifying Facilities ("QFs") with effective contracts under the Public Utility Regulatory Policies Act as of the drafting of this document. Therefore, the NCPAB members LRA have not identified Qualified Capacity Criteria in Section 1.9 for Qualifying Facilities. If in the future the NCPAB members decide to acquire and identify Qualified Capacity in either the annual or monthly Resource Adequacy Plan sourced from Qualifying Facilities, the NCPAB members LRA reserves the right to establish Qualified Capacity Criteria in Section 1.9.

#### **1.9.12 Dispatchable Demand Resource and Participating Loads**

Dispatchable Demand resources and Non-Dispatchable Demand resources must either be identified in Schedule 10B of the Metered Subsystem Aggregation Agreement or located within the NCPA System to be considered Qualified Capacity. Participating Loads must either be identified in Schedule 14 of the Metered Subsystem Aggregation Agreement or located within the NCPA System to be considered Qualified Capacity. Dispatchable Demand resources, Non-Dispatchable Demand resources, and Participating Loads must be available at least 48 hours during the five summer months (May – September) to be counted in either the annual or monthly Resource Adequacy Plan as Qualified Capacity. If a Dispatchable Demand resource or Participating Load is available for the minimum requirement, the megawatt quantity reduction stipulated in the contract or program will be treated as supply and be eligible to be listed as Qualified Capacity. If a Non-Dispatchable Demand resource is available for the minimum requirement, the megawatt quantity reduction stipulated in the contract or program, adjusted to reflect the contract or programs average historical performance, will be treated as supply and be eligible to be listed as Qualified Capacity.

#### **1.9.13 Facilities Under Construction**

The Qualified Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in Section 1.9. The facility will be eligible to be identified as Qualified Capacity in the annual or monthly Resource Adequacy Plan of the NCPAB members pursuant to the anticipated operational date of the facility.

#### **1.9.14 Dynamically Scheduled System Resources**

The Qualified Capacity of a Dynamically Scheduled System Resource to which the NCPAB member has an entitlement shall be the amount of the NCPAB member's entitlement, subject to the deliverability screen pursuant to the provisions of the CAISO Tariff and to, and or, the applicable provisions of the Metered Subsystem Aggregator Agreement. Eligibility as Qualified Capacity is contingent upon the NCPAB members securing transmission through any intervening Control Areas for the resource entitlement that cannot be curtailed for economic reasons or bumped by higher priority transmission. The Qualified Capacity provided by a Dynamically Scheduled System Resource will be limited by the NCPAB member's allocated import capacity at the import Scheduling Points, which is determined pursuant to the provisions of the CAISO Tariff.

#### **1.9.15 Non-Dynamically Scheduled System Resources**

The Qualified Capacity of a Non-Dynamically Scheduled System Resources to which the NCPAB member has an entitlement shall be the amount of the NCPAB member's entitlement, subject to the deliverability screen pursuant to the provisions of the CAISO Tariff and to, and or, the provisions of the Metered Subsystem Aggregator Agreement. The Qualified Capacity provided by a Non-Dynamically Scheduled System Resource will be limited by the NCPAB member's allocated import capacity at the import Scheduling Points, which is determined pursuant to the provisions of the CAISO Tariff.



#### **1.9.16 NCPA System Transmission Ownership Rights**

The capacity entitlement, measured in megawatts, of the NCPA system transmission ownership rights in the CAISO Control Area at the Control Area Scheduling Points will be eligible to be identified as Qualified Capacity in the annual and monthly Resource Adequacy Plans. The capacity entitlement of the NCPA system transmission ownership rights in the CAISO Control Area at the Control Area Scheduling Points are listed in Schedule 13 of the Metered Subsystem Aggregation Agreement, and include but are not limited to the COTP Terminus (as described in the ISO-SMUD Interconnected Control Area Operating Agreement) and the Plumas-Sierra Rural Electric Cooperative transmission ownership rights up to the Marble Substation Scheduling Point (as described in the ISO's Interconnected Control Area Operating Agreement with Sierra Pacific Power Co. for the Marble Substation intertie).